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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/673,327	03/12/2001	Gunter Knepe	HM-361PCT	3564

7590 03/31/2003
Friedrich Kueffner
317 Madison Avenue Suite 910
New York, NY 10017

EXAMINER

LARSON, LOWELL A

ART UNIT	PAPER NUMBER
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3725

17

DATE MAILED: 03/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/673,327

Applicant(s)

KNEPPE ET AL.

Examiner

Lowell A Larson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2002 and 05 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 to 9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 to 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 23, 2002 has been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

3. Claims 1 to 9 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Mercer et al. in view of Salter, Jr.

Mercer et al. discloses a rolling mill roll having bearing means with an integrated hydraulic unit for effecting axial adjustment of the roll in the manner required by these claims. Bushing 14 provides a bearing surface 16 for axial adjustable roll sleeve 18.

Salter, Jr. discloses an axially adjustable rolling mill roll bearing assembly in which bushing 16 provides a bearing surface 14 for roll sleeve 12, and advises that it is preferable to maintain an oil film at surface 14 between the bushing 16 and sleeve 12.

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It would have been obvious to one skilled in the art at the time the invention was made to provide an oil film at the surface 16 between the bushing 14 and sleeve 18 in Mercer et al. in a conventional manner, following the suggestion of Salter, Jr., in order to reduce frictional loads as much as possible during axial adjustments.

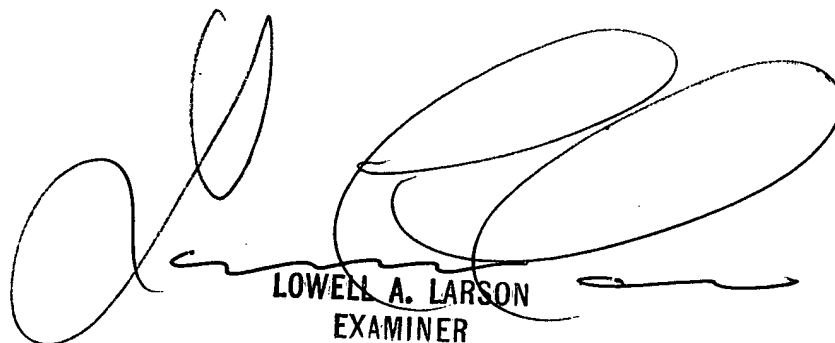
It is noted that Mercer et al. suggests that both rolls of a roll pair can be axially adjustable. To provide the Mercer et al. integral hydraulic unit bearing assembly, modified with oil film means as suggested by Salter, Jr., for all of the axially adjustable rolls is considered to be an obvious mechanical expedient to one skilled in the art merely as a duplication of parts. Additionally, to provide intermediate and/or backup rolls in a conventional manner in a stand having the bearing assemblies of Mercer et al., modified as suggested by Salter, Jr., is an obvious exercise of mechanical design to one skilled in the art, and not a patentable distinction absent a disclosure of criticality in the solution of stated problems in any particular combination of roll arrangement and adjustment means.

Applicant's remarks in the response filed December 23, 2002 have been considered but are not found to be persuasive. Mercer, et al. advises that the integral hydraulic unit bearing assemblies permit axial adjustments of the rolls to be made "while the mill is in operation". See column 3, lines 32 to 35 of Mercer et al. One skilled in the art would understand that while the mill is in operation is the same as "under load", as now required by these claims.

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Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yasuda et al. further shows that it is well known in the art to make axial adjustments of rolls while the rolling mill is in operation, or "under load". In particular see column 6, lines 37 to 45.
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to the undersigned Examiner whose telephone number is (703) 308-1873 and fax number is (703) 305-9835 (draft papers) or (703) 305-3579 (formal papers).



LOWELL A. LARSON
EXAMINER

LAL

March 26, 2003